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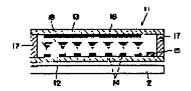
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## (54) LIQUID CRYSTAL DISPLAY DEVICE

## (57) Abstract:

PURPOSE: To improve the accuracy of adjusting brightness in a display part and to improve the simplification of a device by disposing a sensor for detecting the brightness outside an effective display extent in a liquid crystal display element.

CONSTITUTION: The liquid crystal display element 11 is provided with a transparent segment electrode 14 formed to a shape in accordance with a display pattern on the inner surface of the substrate 12; one of two insulating transparent substrates 12 and 13 which are arranged face to face, and also the sensor 15 for detecting the brightness of emitted light is formed on the end part of the inner surface so that it may be positioned outside the effective display extent. And the brightness



of the emitted light in the display part is detected by the sensor 15 formed in the liquid crystal display element 11, and an output signal from a driving circuit 3 to an EL element 2 is changed in accordance with the output of the sensor 15, then, the brightness of the light emitted by the EL element 2 is automatically adjusted so that the brightness of the emitted light in the display part to be actually viewed may be nearly fixed.

## **LEGAL STATUS**

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